Draft Freight Project Classification Criteria



We are very interested in your ideas and feedback. What are we missing? What's most useful for you in this approach? What obstacles exist to implementation? How can we overcome them?

For More Information contact:
Barbara Ivanov
Freight Systems Division Director
206-716-1166 360-705-7931
IvanovB@wsdot.wa.gov



Freight Systems Division PO Box 47407 Olympia, WA 98504-7407



Draft Freight Corridor Classification Criteria



The Washington State Department of Transportation Freight Systems Division (FSD) is working with many stakeholders to develop a data-based method to classify the state's freight corridors and prioritize investment recommendations for Washington State's freight systems. This analysis will be used for determining investments in future Highway System Plans, CIPP, and rail and marine systems.

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Classification Criteria

When fully implemented, the freight corridor classification criteria and freight data program will:

- Identify the state's most important freight corridors and performance problems,
- Prioritize freight corridors by their ability to support state and regional economies,
- Give local, regional and state transportation agencies useful information about all of the state's freight corridors, and
- Produce weighted 'Freight Value' factors that transportation project managers, engineers and planners may use within their existing evaluation process or as a stand-alone when considering improvements to transportation facilities.

The Freight Corridor Criteria and Data Program is planned as a 10-year phased program. Each component will provide stand-alone value to decision makers and transportation professionals.

Proposed freight project classification criteria and screening process steps:

- 1. Determine and agree upon important freightdependent industry sectors.
 - WSDOT's Freight Systems Division has completed this analysis and categorized freight users into three groups:
- Global Gateways: channeling international flow (containers, bulk goods, automobiles, grains and crude oil) through the ports and across the state to national and international destinations.
- Made in Washington: receiving components and shipping goods made by the state's freight-dependent industries (manufacturing, agribusiness, construction and timber/wood products) into the U.S. and global markets.
- Delivering Goods to You: supporting retail distribution of goods (food, fuel, retail goods and parcel deliveries, as well as garbage pick up) to consumers within the state.

2. Set weighted values for freight-dependent industry sectors in our regional economies:

Weighted values will be based on:

- a. Industry sectors' output; measured in terms of annual revenue and employment, statewide.
- b. Geographic distribution; measured as the percentage of the county's total Gross Domestic Product (GDP) produced by the sector.
- c. Predicted growth (using sector-specific growth rates when available, for example: the Washington Public Port Association's Cargo Forecast).

The Central Puget Sound region and Greater Washington will be measured on separate scales relative to their respective economic output.

3. Develop a comprehensive Washington State freight data program that provides high quality, standardized freight data on an ongoing basis.

Data is necessary to implement the freight classification criteria and evaluation process, will be of value to all regions of the state, and will result in improved decision making. Components of the 10-year phased program include:

- Statewide commodity flow data to link freight corridors with regional and state economic output,
- System-wide truck counts and standardized data collection methods,
- Statewide training in the use of the standardized freight data collection and analytic method,
- State freight information center providing a single source for freight data,
- Geographic Information System (GIS) maps of the state's freight system,
- Industry sector growth forecasts to determine future demand
- Inventory of the state's marine and rail system
- Statewide freight system model,
- Targeted freight system analysis and emergent research needs,
- Freight user performance goals and measurements to track freight system performance,
- Urban freight system and operations analysis, and
- Data to support freight-related emission reduction and climate change strategies.

4. Locate statewide production centers and freight hubs.

To be measured as high-volume generators of truck, rail, barge and air-freight trips – and major local distribution trip destinations.

5. Prioritize the state's existing and planned freight corridors.

To be measured by current freight volume, forecasted freight volume, and the economic output associated with the corridors as determined in step #2, in descending order as follows:

- a. Primary statewide shipping routes for receiving inputs and making product deliveries to customers.
 Examples may include:
 - I-5
 - I-90
 - Mainline rail corridors
 - Columbia-Snake River system
 - Fuel pipelines
- b. Connectors between primary routes and freight trip production centers/hubs or secondary routes.
 Examples include:
 - Hwy 2 connecting the Spokane International Airport and I-90
 - Urban arterials such as Spokane St. that connects the Port of Seattle to I-5
 - Hwy 518 that connects I-5 to SeaTac Airport
 - A to-be-identified statewide core all-weather county road system that connects agriculturalzoned land on the local road system to mainlines
 - Corridors that link established commercial trucking districts to the Interstate system and diesel fuel stations
 - Strategic rail transload centers
 - Intermodal connectors (including active NHS Intermodal Connectors)
- c. Secondary routes between production centers and connector or primary route.

Additional consideration will be given to routes that:

- Connect the West Coast mega regions: Vancouver, BC, Greater Seattle, Vancouver/Portland, San Francisco/Oakland, Los Angeles/Long Beach/San Diego.
- Connect Washington State with mega regions to the east.
- Provide safe and legal alternate routes to primary shipping routes.

- Have systemwide impacts.
- Are part of the Strategic Defense Highway Network (STRANET),
- Contribute to regional economic output on a seasonal basis, or
- Provide an opportunity to reduce greenhouse gases and/or diesel emissions.

6. Conduct gap analysis for the three types of freight corridors.

Measure current performance against customers' desired performance and assigning weighted factors to:

- Freight shippers' performance gaps
- Freight carriers' performance gaps
- Safety issues
- Existing road and rail maintenance problems; metric will include pavement condition

This step will provide metrics for WSDOT to measure the success of the freight investment. For example, if we document that shippers and freight carriers want a freight corridor to operate with 90 percent reliability, did the corridor investment improve performance against that goal?

7. Analyze probability of future performance gaps based on growth factors.

This will produce weighted factors in the same categories as step #6.

Please note that if the analysis finds no current or anticipated performance gaps, steps #6 and #7 produce a zero value that's used as a multiplier, therefore producing a total rating for the facility of 0 in the 2009/11 Highway System Plan.

8. Develop wide range of solutions to address important performance gaps.

The solution proposals may be operational and/or infrastructure-related; proposals will include funding options.

9. Rank all solutions based on their ability to fix the problem versus the cost to implement.

This step begins with a mode-neutral evaluation that ranks all proposals by their ability to produce the greatest economic and public benefits at the least cost to both public and private sectors. The step is completed by conducting full benefit/cost evaluations of the highest ranking proposals; benefit/cost analyses will include a 'No Action' case.

10.Decision makers consider the prioritized freight system proposals and determine allocation of public resources.